RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _____ 10/030,194 B

Source: _____ IFW16

Date Processed by STIC: _____ 11/13/2006

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IFW16

RAW SEQUENCE LISTING   DATE: 11/13/2006
PATENT APPLICATION: US/10/030,194B   TIME: 12:30:18

Input Set : A:\218874US0PCT.txt
Output Set: N:\CRF4\11132006\J030194B.raw

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  3 <110> APPLICANT: RENARD, MICHEL
  4        DELOURME, REGINE
  5        BARRET, PIERRE
  6        BRUNEL, DOMINIQUE
  7        FROGER, NICOLE
  8        TANGUY, XAVIER
 10 <120> TITLE OF INVENTION: MUTANT GENE OF THE GRAS FAMILY AND PLANTS WITH REDUCED
 11        DEVELOPMENT CONTAINING SAID MUTANT GENE
 13 <130> FILE REFERENCE: 218874US0PCT
 15 <140> CURRENT APPLICATION NUMBER: 10/030,194B
C--> 16 <141> CURRENT FILING DATE: 2002-08-15
 18 <150> PRIOR APPLICATION NUMBER: PCT/FR00/02216
 19 <151> PRIOR FILING DATE: 2000-08-02
 21 <150> PRIOR APPLICATION NUMBER: FR 9910023
 22 <151> PRIOR FILING DATE: 1999-08-02
 24 <160> NUMBER OF SEQ ID NOS: 7
 26 <170> SOFTWARE: PatentIn version 3.3
 28 <210> SEQ ID NO: 1
 29 <211> LENGTH: 1779
 30 <212> TYPE: DNA
 31 <213> ORGANISM: Brassica napus
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 35 <221> NAME/KEY: CDS
 36 <222> LOCATION: (60)..(1778)
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 43 1               5                   10                  15
 45 atc gcc ggt tct tcc act tct tcc cct gcg gtg ttt ggt aaa gac aag     155
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 50 Met Met Met Val Lys Glu Glu Glu Asp Asp Glu Leu Leu Gly Val Leu
 51         35                  40                  45
 53 ggt tac aag gtt agg tct tcg gag atg gct gag gtt gcg ttg aaa ctc     251
 54 Gly Tyr Lys Val Arg Ser Ser Glu Met Ala Glu Val Ala Leu Lys Leu
 55     50                  55                  60
 57 gag cag ctt gag acg atg atg ggt aac gct caa gaa gac ggt tta gct     299
 58 Glu Gln Leu Glu Thr Met Met Gly Asn Ala Gln Glu Asp Gly Leu Ala
 59 65                  70                  75                  80
 61 cac ctc gcg acg gat act gtt cat tac aac ccc gct gag ctt tac tcg     347
 62 His Leu Ala Thr Asp Thr Val His Tyr Asn Pro Ala Glu Leu Tyr Ser
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69 gga tct aac gct ttg aac ccg gag att aat aat aat aat aat aac tcg        443
70 Gly Ser Asn Ala Leu Asn Pro Glu Ile Asn Asn Asn Asn Asn Asn Ser
71                  115                 120                 125
73 ttt ttc acc gga ggc gac ctc aaa gcg att cct gga aac gcg gtt tgt        491
74 Phe Phe Thr Gly Gly Asp Leu Lys Ala Ile Pro Gly Asn Ala Val Cys
75         130                 135                 140
77 cgc aga tct aat cag ttc gcg ttt gcg gtt gat tcg tcg agt aat aag        539
78 Arg Arg Ser Asn Gln Phe Ala Phe Ala Val Asp Ser Ser Ser Asn Lys
79 145                 150                 155                 160
81 cgt ttg aaa ccg tcc tcg agc cct gat tcg atg gtt aca tct cca tca        587
82 Arg Leu Lys Pro Ser Ser Ser Pro Asp Ser Met Val Thr Ser Pro Ser
83                  165                 170                 175
85 cct gct gga gtt ata gga acg acg gtt aca acc gtg acc gag tca act        635
86 Pro Ala Gly Val Ile Gly Thr Thr Val Thr Thr Val Thr Glu Ser Thr
87                  180                 185                 190
89 cgt cct tta atc ctg gtc gac tcg cag gac aac gga gtg cgt cta gtc        683
90 Arg Pro Leu Ile Leu Val Asp Ser Gln Asp Asn Gly Val Arg Leu Val
91         195                 200                 205
93 cac gcg ctt atg gcc tgc gct gaa gcc gtg cag agc agc aac ttg act        731
94 His Ala Leu Met Ala Cys Ala Glu Ala Val Gln Ser Ser Asn Leu Thr
95         210                 215                 220
97 cta gcg gag gct ctc gtt aag cag att ggt ttc ttg gcc gtc tct caa        779
98 Leu Ala Glu Ala Leu Val Lys Gln Ile Gly Phe Leu Ala Val Ser Gln
99 225                 230                 235                 240
101 gcc gga gcc atg agg aaa gtc gcc acg tac ttc gcc gaa gct ctc gcg       827
102 Ala Gly Ala Met Arg Lys Val Ala Thr Tyr Phe Ala Glu Ala Leu Ala
103                 245                 250                 255
105 cgg agg atc tac cgc ctc tct ccg ccg cag acg cag atc gat cac tct       875
106 Arg Arg Ile Tyr Arg Leu Ser Pro Pro Gln Thr Gln Ile Asp His Ser
107                 260                 265                 270
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111         275                 280                 285
113 aag ttc gct cac ttc acg gcg aat cag gcg att ctc gag gct ttc gaa       971
114 Lys Phe Ala His Phe Thr Ala Asn Gln Ala Ile Leu Glu Ala Phe Glu
115         290                 295                 300
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118 Gly Lys Lys Arg Val His Val Ile Asp Phe Ser Met Asn Gln Gly Leu
119 305                 310                 315                 320
121 cag tgg ccc gcg ctt atg caa gcc ctt gcg ttg agg gaa gga ggt cct      1067
122 Gln Trp Pro Ala Leu Met Gln Ala Leu Ala Leu Arg Glu Gly Gly Pro
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125 ccg agt ttc agg tta acc gga att ggt cct ccc gcg gcg gat aac tcc      1115
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133 att cac gtc gag ttt gag tat cgt ggc ttt gtt gct aat agc tta gct     1211
134 Ile His Val Glu Phe Glu Tyr Arg Gly Phe Val Ala Asn Ser Leu Ala
135         370                 375                 380
137 gat ctt gat gcc tcg atg ctt gag ctt aga ccg agt gaa acc gaa gct     1259
138 Asp Leu Asp Ala Ser Met Leu Glu Leu Arg Pro Ser Glu Thr Glu Ala
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141 gtg gcg gtt aac tct gtt ttc gag ctc cac aag ctc cta ggc cgt acc     1307
142 Val Ala Val Asn Ser Val Phe Glu Leu His Lys Leu Leu Gly Arg Thr
143                 405                 410                 415
145 ggt ggg ata gag aaa gtc ttc ggc gtt gtg aaa cag att aaa ccg gtg     1355
146 Gly Gly Ile Glu Lys Val Phe Gly Val Val Lys Gln Ile Lys Pro Val
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149 att ttc acg gtt gtt gag caa gaa tcg aat cat aac ggt ccg gtt ttc     1403
150 Ile Phe Thr Val Val Glu Gln Glu Ser Asn His Asn Gly Pro Val Phe
151         435                 440                 445
153 tta gac cgg ttt act gaa tcg ctg cat tat tat tcg acg ttg ttt gat     1451
154 Leu Asp Arg Phe Thr Glu Ser Leu His Tyr Tyr Ser Thr Leu Phe Asp
155         450                 455                 460
157 tcc ttg gaa ggt gct ccg agt agc caa gat aaa gtt atg tcg gaa gtt     1499
158 Ser Leu Glu Gly Ala Pro Ser Ser Gln Asp Lys Val Met Ser Glu Val
159 465                 470                 475                 480
161 tat tta ggg aaa cag att tgc aat ctg gtg gct tgc gaa ggt ccg gac     1547
162 Tyr Leu Gly Lys Gln Ile Cys Asn Leu Val Ala Cys Glu Gly Pro Asp
163                 485                 490                 495
165 cgt gtt gag aga cat gag acg ctg agt caa tgg tcg aac cgg ttc ggt     1595
166 Arg Val Glu Arg His Glu Thr Leu Ser Gln Trp Ser Asn Arg Phe Gly
167                 500                 505                 510
169 tcg tcc ggt ttt gcg ccg gcg cat ctc ggg tct aac gcg ttt aag caa     1643
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171         515                 520                 525
173 gcg agt acg ctt ttg gct ttg ttt aat gga ggc gaa ggt tat cgt gtg     1691
174 Ala Ser Thr Leu Leu Ala Leu Phe Asn Gly Gly Glu Gly Tyr Arg Val
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177 gag gag aat aat ggg tgt ttg atg ttg agt tgg cac act cga ccg ctc     1739
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179 545                 550                 555                 560
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187 <211> LENGTH: 572
188 <212> TYPE: PRT
189 <213> ORGANISM: Brassica napus
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209 Glu Gln Leu Glu Thr Met Met Gly Asn Ala Gln Glu Asp Gly Leu Ala
210 65              70              75              80
213 His Leu Ala Thr Asp Thr Val His Tyr Asn Pro Ala Glu Leu Tyr Ser
214              85              90              95
217 Trp Leu Asp Asn Met Leu Thr Glu Leu Asn Pro Pro Ala Ala Thr Thr
218         100             105             110
221 Gly Ser Asn Ala Leu Asn Pro Glu Ile Asn Asn Asn Asn Asn Asn Ser
222      115             120             125
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234             165             170             175
237 Pro Ala Gly Val Ile Gly Thr Thr Val Thr Thr Val Thr Glu Ser Thr
238         180             185             190
241 Arg Pro Leu Ile Leu Val Asp Ser Gln Asp Asn Gly Val Arg Leu Val
242      195             200             205
245 His Ala Leu Met Ala Cys Ala Glu Ala Val Gln Ser Ser Asn Leu Thr
246      210             215             220
249 Leu Ala Glu Ala Leu Val Lys Gln Ile Gly Phe Leu Ala Val Ser Gln
250 225             230             235             240
253 Ala Gly Ala Met Arg Lys Val Ala Thr Tyr Phe Ala Glu Ala Leu Ala
254             245             250             255
257 Arg Arg Ile Tyr Arg Leu Ser Pro Pro Gln Thr Gln Ile Asp His Ser
258             260             265             270
261 Leu Ser Asp Thr Leu Gln Met His Phe Tyr Glu Thr Cys Pro Tyr Leu
262      275             280             285
265 Lys Phe Ala His Phe Thr Ala Asn Gln Ala Ile Leu Glu Ala Phe Glu
266      290             295             300
269 Gly Lys Lys Arg Val His Val Ile Asp Phe Ser Met Asn Gln Gly Leu
270 305             310             315             320
273 Gln Trp Pro Ala Leu Met Gln Ala Leu Ala Leu Arg Glu Gly Gly Pro
274             325             330             335
277 Pro Ser Phe Arg Leu Thr Gly Ile Gly Pro Pro Ala Ala Asp Asn Ser
278             340             345             350
281 Asp His Leu His Glu Val Gly Cys Lys Leu Ala Gln Leu Ala Glu Ala
282      355             360             365
285 Ile His Val Glu Phe Glu Tyr Arg Gly Phe Val Ala Asn Ser Leu Ala
286      370             375             380
289 Asp Leu Asp Ala Ser Met Leu Glu Leu Arg Pro Ser Glu Thr Glu Ala
290 385             390             395             400
293 Val Ala Val Asn Ser Val Phe Glu Leu His Lys Leu Leu Gly Arg Thr
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294                 405                 410                 415
297 Gly Gly Ile Glu Lys Val Phe Gly Val Val Lys Gln Ile Lys Pro Val
298             420         .       425             430
301 Ile Phe Thr Val Val Glu Gln Glu Ser Asn His Asn Gly Pro Val Phe
302         435             440             445
305·Leu Asp Arg Phe Thr Glu Ser Leu His Tyr Tyr Ser Thr Leu Phe Asp
306     450             455             460
309 Ser Leu Glu Gly Ala Pro Ser Ser Gln Asp Lys Val Met Ser Glu Val ·
310 465             470             475             480
313 Tyr Leu Gly Lys Gln Ile Cys Asn Leu Val Ala Cys Glu Gly Pro Asp
314             485             490             495
317 Arg Val Glu Arg His Glu Thr Leu Ser Gln Trp Ser Asn Arg Phe Gly
318             500         .       505             510
321 Ser Ser Gly Phe Ala Pro Ala His Leu Gly Ser Asn Ala Phe Lys Gln
322         515             520             525
325 Ala Ser Thr Leu Leu Ala Leu Phe Asn Gly Gly Glu Gly Tyr Arg Val
326     530             535             540
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334             565             570
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339 <212> TYPE: DNA
340 <213> ORGANISM: Brassica napus
343 <220> FEATURE:
344 <221> NAME/KEY: CDS
345 <222> LOCATION: (60)..(1778)
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350 atg aag agg gat ctt cat cag ttc caa ggt ccc aac cac ggg aca tca     107
351 Met Lys Arg Asp Leu His Gln Phe Gln Gly Pro Asn His Gly Thr Ser
352 1           .       5                   10                  15
354 atc gcc ggt tct tcc act tct tcc cct gcg gtg ttt ggt aaa gac aag     155
355 Ile Ala Gly Ser Ser Thr Ser Ser Pro Ala Val Phe Gly Lys Asp Lys
356             20                  25                  30
358 atg atg atg gtc aaa gaa gaa gaa gac gac gag ctt cta gga gtc ttg     203
359 Met Met Met Val Lys Glu Glu Glu Asp Asp Glu Leu Leu Gly Val Leu
360         35                  40                  45
362 ggt tac aag gtt agg tct tcg gag atg gct gag gtt gcg ttg aaa ctc     251
363 Gly Tyr Lys Val Arg Ser Ser Glu Met Ala Glu Val Ala Leu Lys Leu
364     50                  55                  60
366 gag cag ctt gag acg atg atg ggt aac gct caa gaa gac ggt tta gct     299
367 Glu Gln Leu Glu Thr Met Met Gly Asn Ala Gln Glu Asp Gly Leu Ala
368 65              ·70         .       75                  80
370 cac ctc gcg acg gat act gtt cat tac·aac ccc gct gag ctt tac tcg     347
371 His Leu Ala Thr Asp Thr Val His Tyr Asn Pro Ala Glu Leu Tyr Ser
372             85                  90                  95
374 tgg ctt·gat aac atg ctc acg gag ctt aac cca ccc gct gca acg acc     395
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 11/13/2006
PATENT APPLICATION: US/10/030,194B   TIME: 12:30:19

Input Set : **A:\218874US0PCT.txt**
Output Set: **N:\CRF4\11132006\J030194B.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 3
Seq#:6; Xaa Pos. 3,6
Seq#:7; Xaa Pos. 3,6

VERIFICATION SUMMARY   DATE: 11/13/2006
PATENT APPLICATION: **US/10/030,194B**   TIME: 12:30:19

Input Set : **A:\218874US0PCT.txt**
Output Set: **N:\CRF4\11132006\J030194B.raw**

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L:662 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:687 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:712 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
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